WHAT IS CLAIMED IS:

1.   A method for generating an image of a heart at a selected cardiac phase, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

introducing a time delay into the first ECG to generate a phase-delayed ECG of the heart at the first phase; and

using the first ECG and the phase-delayed ECG to generate an image of the heart.

2.   A method in accordance with Claim 1 wherein said using the first ECG and the phase-delayed ECG to generate an image of the heart comprises using the first ECG and the phase-delayed ECG to generate an MRI image of the heart.

3.   A method in accordance with Claim 1 wherein said introducing a time delay into the first ECG comprises filtering the first ECG to introduce the time delay.

4.   A method in accordance with Claim 1 further comprising:

receiving at a pulse sequence descriptor (PSD) the first ECG and the phase-delayed ECG; and

using the PSD to determine if the first ECG and the phase-delayed ECG comprise the same approximate phase information.

5.   A method in accordance with Claim 4 further comprising:

rejecting the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

re-initializing an MRI system to re-acquire cardiac information of the heart.

6.   A method in accordance with Claim 4 further comprising:

rejecting the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

extrapolating a cardiac phase based on the phase information included in the first ECG and the phase-delayed ECG.

7.   A method in accordance with Claim 4 further comprising:

accepting the first ECG and the phase-delayed ECG; and

generating an image of the heart using the first ECG and the phase-delayed ECG.

8.   A method for generating an image of a heart at a selected cardiac phase using an MRI imaging system, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

acquiring a second electrocardiogram (ECG) of the heart at the first phase; and

using the first ECG and the second ECG to generate an image of the heart.

9.   A method in accordance with Claim 8 further comprising:

receiving at a pulse sequence descriptor (PSD) the first ECG and the second ECG; and

determining if the first ECG and the second ECG comprise the same approximate phase information.

10.   A method in accordance with Claim 9 further comprising:

rejecting the first ECG and the second ECG based on the phase information in the first ECG and the second ECG; and

re-initializing an MRI system to re-acquire cardiac information of the heart.

11.   A method in accordance with Claim 9 further comprising:

accepting the first ECG and the phase-delayed ECG based on the phase information in the first ECG and the phase-delayed ECG; and

generating an image of the heart using the first ECG and the phase-delayed ECG.

12.   A method for generating an image of a heart at a selected cardiac phase, said method comprising:

acquiring a first electrocardiogram (ECG) of the heart at a first phase;

acquiring a first plethysmograph signal of the heart at a first phase; and

using the first ECG and the first plethysmograph signal to generate an image of the heart.

13.   A method in accordance with Claim 12 wherein said acquiring a first electrocardiogram (ECG) of the heart at a first phase comprises acquiring a first plethysmograph signal of the heart at a first phase using a magnetic resonance imaging (MRI) system.

14.   A method in accordance with Claim 12 further comprising:

receiving at a pulse sequence descriptor (PSD) the first ECG and the first plethysmograph signal; and

determining if the first ECG and the first plethysmograph signal comprise the same approximate phase information.

15.   A method in accordance with Claim 14 further comprising:

rejecting the first ECG and the first plethysmograph signal based on the phase information in the first ECG and the first plethysmograph signal; and

re-initializing the MRI system to re-acquire cardiac information of the heart.

16.   A method in accordance with Claim 14 further comprising:

accepting the first ECG and the first plethysmograph signal based on the phase information in the first ECG and the first plethysmograph signal; and

generating an image of the heart using the first ECG and the first plethysmograph signal.

17.   A magnetic resonance imaging (MRI) system comprising:

a radio frequency (RF) coil assembly for imaging a subject volume; and

a computer coupled to said RF coil, said computer configured to:

acquire a first electrocardiogram (ECG) of the heart at a first phase;

introduce a time delay into the first ECG to generate a phase-delayed ECG of the heart at the first phase; and

use the first ECG and the phase-delayed ECG to generate an image of the heart.

18.   An MRI system in accordance with Claim 17 wherein said computer is further configured to filter the first ECG to introduce the time delay.

19.   An MRI system in accordance with Claim 17 wherein said computer is further configured to:

receive at a pulse sequence descriptor (PSD) the first ECG and the phase-delayed ECG; and

determine if the first ECG and the phase-delayed ECG have the same approximate phase information.

20.   An MRI system in accordance with Claim 17 wherein said computer is further configured to:

reject the first ECG and the phase-delayed ECG based on the phase information included in the first ECG and the phase-delayed ECG; and

re-initiate the MRI system to re-acquire cardiac information of the heart.

21.   An MRI system in accordance with Claim 17 wherein said computer is further configured to:

accept the first ECG and the phase-delayed ECG; and

generate an image of the heart using the first ECG and the phase-delayed ECG.

22.   A computer program embodied on a computer readable medium for controlling a medical imaging system, said program configured to:

acquire a first electrocardiogram (ECG) of the heart at a first phase;

acquire a second electrocardiogram (ECG) of the heart at the first phase; and

use the first ECG and the second ECG to generate an image of the heart.

23.   A computer program in accordance with Claim 22 wherein said program further configured to:

receive at a pulse sequence descriptor (PSD) the first ECG and the second ECG; and

determine if the first ECG and the second ECG comprise the same approximate phase information.

24.   A computer program in accordance with Claim 22 wherein said program further configured to:

reject the first ECG and the second ECG based on the phase information in the first ECG and the second ECG; and

re-initiate the MRI system to re-acquire cardiac information of the heart.

25.   A computer program in accordance with Claim 22 wherein said program further configured to:

accept the first ECG and the phase-delayed ECG based on the phase information in the first ECG and the phase-delayed ECG; and

generate an image of the heart using the first ECG and the phase-delayed ECG.